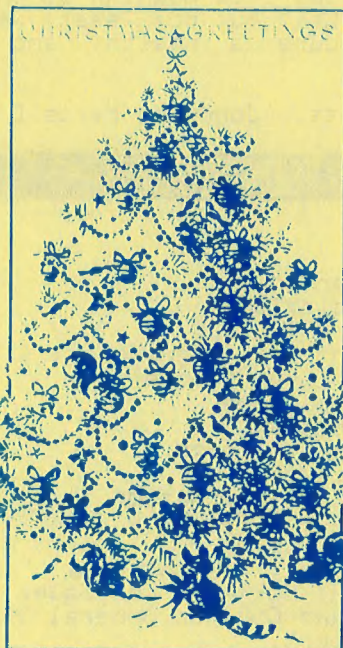


* LE'VZ 200/300 *

Owner's Operators Programmers

** THE SOUTH PACIFIC MAGAZINE FOR VZ COLOUR COMPUTERS **

NOVEMBER 1987. #18 A\$2.00.



EDITORIAL



Greetings Readers, Olla.

I am starting this Editorial in the middle of September, just after the football grand-finals, after the last of Australia's skiable snow and during Brisbane's Warana Festival. *So what you say.* Well it means that I am starting it before our hectic season gets under way. Brisbane-ites are beginning to become rather excited as the *World Expo 1988* is taking shape. It is certainly going to be an event to remember. We have never been to one so we are really enthusiastic about it. It will affect everyone in some way, even to folk who do not attend. The high technology will "blow ones mind". Laser effects will be seen every night. About 38 countries are to be represented, boy what a show.

For those interested, you can receive a swag of information by telephoning EXPO '88 on (07)840 1988, or write to :- P.O. Box 1988, Southbank, QLD 4101, Australia.

Before I get to VZ items, I must mention the proposed Australia Card. I realise some folk will say that LE'VZ is not the place to talk about such things, but I say that with this very important matter I have a duty to do so. We are NOT in favour of the Australia Card in this house-hold. Most OOPs should know that *any data-base is not entirely secure.*

I will mention just one incident in regards to the Commonwealth Electoral Commission's new computerised system. As recently reported in the press, there were about 300,000 people sent "Please explain" notices of why they did not vote. Our married daughter voted with her husband and received one of these notices. Was she hopping mad!!

Of course the "Hackers" would have a field day wouldn't they. I am sure I wouldn't want my data being manipulated. *would you?* Did many folk read in the press about a notorious "Hacker" called *Blue Thunder*? I wrote a short item about him in LE'VZ #12 June 1985, warning people not to send money to an A.P.O. Box number. It referred to Celestron Software. His court case was held on the 7th. of September in Melbourne to decide his case. There were many counts of fraud to answer, amounting to around \$4800.00. Much of his hacking was via Westpac Mastercard. What do you think of that??

On page 13 I have printed a bigger list of folk who have volunteered to answer your questions on most aspects of VZ computing. I find that I just do NOT have the time to answer most technical, hardware and programming queries. *Please contact these folk directly.* Contact the one/s who relate to your problem. Always enclose an S.A.S. Envelope for written replies. Telephone at a reasonable time.



We will be combining our *Christmas Mini-Expo* with the *BVZUH* on Saturday the 5th. of December at the location of the *BVZUH*. WHICH IS:- Capalaba State High School, School Rd., Capalaba, QLD.

See report elsewhere in this LE'VZ. This one will be bigger and better than the last Mini-Expo. I will have a video unit in operation to keep the "non-computerists" occupied. See page 8 for more details.

Next year is certainly going to be an exciting one with EXPO '88 and our *Bi-Centennial celebrations.*

Finally there is the most important celebration of all almost with us again; that being *Christmas*. Marie and I wish that you and your family have a *happy and joyous Christmas time*, and hope that you experience the true meaning of this special occasion. Last but not least, we also wish you and yours a healthy and happy *New Year 1988.*

GOD bless, John and Marie D'Alton.

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*** * A THREE YEAR INDEX * ***

LE'VZ FROM #1 JUNE '84 TO #17 AUGUST '87.

This index covers from our first LE'VZ 200 OOP which was only a single A4 sheet to the previous LE'VZ 200/300 OOP #17 August.

As mentioned on page 11 of this LE'VZ, back issues are available from #8 to the current issue. If there is a particular article or item in the first seven issues that you would like, please see if you can obtain/borrow that LE'VZ to enable you to get the item that you are after. Failing that, I may be able to copy that item ONLY for you at 20 cents per A4 page.

#2 Hints and Kinks.	Page 1.	#12BASIC Mean Streets game programme.	3.
" VZ Writer. My early Word Processor.	2.	" Software for Sale.	4.
" A faster tape data save/load routine.	2.	" M/L routines to fix the bug in the DSE.	5.
#3 Hardware. Transistor monitor to hear signals on the tape recorder.	1.	Editor Assembler	6.
" Questions and Help section.	2.	" Binary to Decimal conversion.	7.
" Peeking and Poking a variable greater than 255.	2.	" List of hardware. Speech & music for the VZ.	8.
" Double precision in BASIC.	3.	" Hardware. Speech synthesiser using the SP0256-AL2.	9.
" Software library.	3.	" BASIC High Res drawing programme.	10.
#4 Three other VZ clubs.	1.	" Centronics pin connections.	11.
" M/L programming. Poking the data (embedding) by BASIC into the programme.	2.	" BASIC DIM programming.	12.
" Software library.	4.	" M/L routine to search for a particular byte.	2.
" Hardware. Fitting a capitals lock switch.	5.	#13BASIC game Mean Streets programme. Conclusion.	3.
For use with the E&F WP.	6.	" BASIC Bio Plot programme.	5.
" Questions and Help section.	7.	" BASIC High Res programming.	6.
" M/L programming. Colour change.	2.	" Software for Sale.	7.
#5 M/L routine for the BMC BX-80 printer to <COPY>.	2.	" Other Clubs.	8.
" M/L joystick programming.	3.	" Video Handling. Part 1.	9.
" BASIC joystick programming.	3.	#14BASIC game Grid Iron programme.	2.
" BASIC variation to <INKEYS>.	4.	" BASIC High Res letter programme.	4.
" Software library.	5.	" Short item about Bulletin Boards.	5.
" Software review. DSE Supersnake, Ladder Challenge and E&F Wordprocessor.	6.	" Software for Sale.	6.
" Instant Letter programme.	6.	" Printer Patch notes.	7.
#6 Hints and Kinks.	6.	" BASIC Disc System programming.	8.
" Bugs.	1.	" Video Handling. Part 2.	9.
" Software for sale.	2.	" M/L routine to extend text space for the E&F WP.	10.
" Battleships BASIC programme.	3.	" BASIC Disc Menu programme.	11.
" Word Times BASIC programme.	7.	#15Using the Disc Drive System.	2.
" RTTY with the DSE. RTTY Adaptor.	9.	" BASIC game programme, Grid Iron.	3.
#7 Bugs.	2.	" Disc Drive programming.	4.
" Some communication addresses.	3.	" VZ ROM printer routines.	5.
" Software for sale.	3.	" Other clubs.	6.
" Conclusion of World Times BASIC programme.	5.	" Software for sale.	7.
" High resolution number and letter programming in BASIC.	6.	" EXTENDED BASIC programming.	8.
" Trading post.	7.	" Christmas 1986 Mini-Expo.	10.
#8 Bugs.	2.	" Names and Addresses of "experts" who may be able to help you.	12.
" Hints and Kinks.	2.	#16Starter hints for beginners.	2.
" BASIC programming. PRINT\$, and PRINT USING.	2.	" Printing A4 with the Dissassembler.	4.
" Software Review. Scotland Yard.	4.	" BASIC demo of M/L calls, 0A7FH and 0A9AH.	4.
" Software for sale.	4.	" Hardware. Shift lock switches.	5.
" BASIC programme, Diving Log.	6.	" Read disc BASIC programme.	6.
" Trading Post.	8.	" Help section.	6.
#9 M/L programming.	2.	" Other clubs.	6.
" HEX to DEC conversion table.	4.	" Modification in M/L for W.Obrist's EXT. BASIC to work with DOS.	7.
" Hints and Kinks.	5.	" My printer by Bob Jones.	8.
" M/L modification to Chris Stamboulidis's Find Word routine.	7.	" QUICKWRITE demo print with a Citizen 120-D printer.	8.
" M/L sound routine.	9.	" Enhanced BASIC CLS. Pt. 1.	9.
" Software for Sale.	10.	" Introduction to programming. Pt. 1.	9.
#10Hardware. Fitting a space bar to a VZ200.	2.	" Software for sale.	11.
" BASIC Game Adventure programme.	3.	" Memory dumps to tape in BASIC.	13.
" BASIC Sound Effects programme.	5.	" LE'VZ formats.	15.
" Software for Sale.	6.	" PCV to DEC. BASIC programme.	16.
" EXTENDED BASIC ON GOTO programming.	7.	" Brisbane VZ Users Workshop report.	17.
" List of software, hardware, magazine articles.	8.	" Hardware for sale.	18.
" Tape loading formats.	9.	#17EXTENDED BASIC programming.	3.
#11BASIC Game Adventure programme conclusion.	2.	" DEC to HEX BASIC programme.	3.
" Using the OUT port to printer.	3.	" BASIC game - Races.	4.
" Software review. Wordsquares.	3.	" Introduction to programming. Pt. 2. Final.	5.
" BASIC plotting programme.	4.	" Other clubs.	6.
" BASIC Monitor programme.	5.	" Hardware. 32K memory expansion.	7.
" BASIC programme for the Chatterbox voice synthesiser.	6.	" BASIC modification to DSE. Mailing List for disc.	8.
" Hardware. Input and output notes.	7.	" Word puzzle.	9.
" Software for Sale.	8.	" Screen dump to a printer/plotter.	9.
" Hardware. The VZ200 keypad notes.	10.	" Enhanced BASIC in M/L. Pt. 2.	9.
		" Software for sale.	10.
		" LE'VZ formats.	11.
		" Dot Matrix printers.	12.
		" Using printers with the QUICKWRITE Word Processor.	14.
		" Printing on A4 with the Editor Assembler.	14.
		" Brisbane VZ Users Workshop report.	15.

BOB KITCH'S VIDEO ARTICLE.

I am sorry to announce that Bobs' article that was printed in LE'VZ #13 and #14 has to end there. There is quite a lot more to it, but due to unforeseen problems I can't continue it. For people who want to follow his article up, please refer to *Australian Electronics Magazines* issue September and October 1986. (J.D.)



DIGITAL DISPLAY FOR VZ200/VZ300.

By Frank Rees.

27 King St., BOORT. VIC 3537.

When I was studying the Dream 6800 computer, a programme to use the Dream as a frequency meter was published. It was written in a language called CHIP 8 and 6800 based on a similar programme for CHIP 8 computers. The RCA VIP which was CHIP 8 and 1802. The large characters of CHIP 8 made a wonderful digital display which can be read across the room and I used it in final adjustments to a Dream F.S.K. tape system 1200/2400 Hz frequency.

More recently I saw but did not fully read a similar programme for the Apple in Australian Electronics Monthly by "Dreamer" friend Mr. Roger Graham, and now an Amstrad version by another hobby friend, Mr. Peter Lukes, which was also published in AEM.

This and a letter from a VZ owner friend, Mr. Graeme Knight in Bendigo got me thinking. How about one for other computers, but with the big character set of CHIP 8 or better. The VZ, MC10 AND CO CO have a lot in common including the 6847 sound and video chip, so my first thought was to write a display programme for all, then write a frequency measuring routine and hardware in turn. Naturally the display programme would have many other uses plus could be used to show how a multi-character set could be prepared for a given purpose.

Where to start?

I decided to use the SG4 A 2X2 graphic mode and a 5X7 matrix using 3X4 of the 2X2 characters in CG4 graphic set. My pocket computer, the first Sharp/Tandy provided a set of characters to model from, and 0 to 9 plus decimal point was made the minimum requirements for the project.

At this point it would be best to look at the illustration of the numeral three (3) and see how the code was prepared.

A string of these large characters can be added as seen in the programme, each of the large numbers is three characters of graphic left to right and there are four lines down for each number. Look at data lines 1030 to 1033. These four lines are required for the numeral three (3). The line number is used to help identify. The third number in line numbers mentioned is three then last is 0 to 3. This indicates first to last of screen character lines to build height of the numeral three (3). See fig. 1 again.

The characters are read into the number array so that a simple formula $N \times 4$ finds start of storage of four rows of three columns each for the required numeral to be displayed. Note that while the MC10 book and the VZ keyboard show graphic characters correctly, the MC 10 keyboard and the VZ book shows the characters inverted.

A simple routine will get the code for you. Try :-

```
10 INPUT CH$:PRINT ASC(CH$):GOTO 10
```

For the VZ add:-
5 COLOR 1

Now type the graphic character, see if its what you want and note the code number for it.

I hope you enjoy the article. Letters are welcomed and promptly answered.

Frank Rees.

```
100 REM%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
110 REM%%
120 REM%% DIGITAL DISPLAY UNIT FOR.. MC-10, CO-CO, VZ .. %%
130 REM%%
140 REM%%
150 REM%% FRANK REES 27 KING ST. BOORT 3537 VICTORIA AUSTRALIA %%
160 REM%%
170 REM%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
180 REM SG4 2X2 GRAPHICS
190 REM LARGE NUMBER DISPLAY
200 REM LARGE NUMBERS 0-9 + DECIMAL POINT = 11 NUMBER CHARACTERS
210 CLEAR200
220 DIM CH$(43) : REM ARRAY 0-43 = 44 ELEMENTS
230 REM 4 LINES PER NUMBER CHARACTER X 11 CHARACTERS = 44
240 BEG = 193: REM BEGINNING OF DISPLAY
250 LOC = BEG: REM LOCATION OF NEXT NUMBER CHARACTER TO DISPLAY
260 CLS:GOSUB1000
265 COLOR 1: REM THIS LINE VZ ONLY
270 REM 8 CHARACTERS PER LINE MAX.
280 REM 4 LINE HIGH NUMBER CHARACTERS
290 REM GRAPHIC CHARACTERS 2X2
300 REM 32 GRAPHIC CHARACTERS PER LINE .
310 REM 4 LINES HIGH NUMBERS
320 CLS:PRINT# 100,"ENTER A NUMBER 0-99999.99"
330 PRINT " ":INPUT N
340 IF N > 99999.99 THEN GOTO 320
350 N=INT(N*100): REM FIX AT 2 AFTER DECIMAL POINT
360 NS=STR$(N):L=LEN(NS)-1:REM -1 TO REMOVE SPACE FOR + OR - SIGN.
370 NS=MIDS(NS,2,L): REM SAVE ALL BUT THE SPACE FOR SIGN.
380 IF LEN(NS)<7 THEN NS="0"+NS:GOTO 380
390 LOC=BEG: REM START CENTER LEFT.
400 FOR X=1 TO 5: REM DISPLAY FIRST 5 NUMBERS COUNT.
410 N=VAL(MIDS(NS,X,1))
420 GOSUB 530:REM DISPLAY LARGE NUMBER.
430 NEXT X
440 N=10:GOSUB 530: REM DISPLAY DECIMAL POINT
450 FOR X=6 TO 7:REM DISPLAY 2 NUMBERS AFTER DECIMAL POINT
460 N=VAL(MIDS(NS,X,1))
470 GOSUB 530
480 NEXT X
490 PRINT:PRINT " AGAIN YES/NO (Y/N)"
500 ANS=INKEY$:IF ANS="" GOTO 500
510 IF ANS<>"N" THEN GOTO 320
520 CLS:END
530 FOR C=0 TO 9
540 PRINT#LOC,CH$(C+NX4);
550 LOC=LOC+32
560 NEXT C
570 LOC=LOC-(32*4)+4: REM NEXT X,Y
580 RETURN
590 END
```

CONTINUED...

LINE	ARRAY	CODE	CODE	CODE
1030	CH\$(12) =	131	130	135
1031	CH\$(13) =	142	132	143
1032	CH\$(14) =	143	143	133
1033	CH\$(15) =	131	131	143
FIG ONE				

Continued on page 5.

DIGITAL DISPLAY UNIT CONTINUED ...

```

1000 CH$(0)=CHR$(137)+CHR$(131)+CHR$(141)
1001 CH$(1)=CHR$(133)+CHR$(143)+CHR$(133)
1002 CH$(2)=CHR$(133)+CHR$(143)+CHR$(133)
1003 CH$(3)=CHR$(139)+CHR$(131)+CHR$(143)
1010 CH$(4)=CHR$(142)+CHR$(133)+CHR$(143)
1011 CH$(5)=CHR$(143)+CHR$(133)+CHR$(143)
1012 CH$(6)=CHR$(143)+CHR$(133)+CHR$(143)
1013 CH$(7)=CHR$(139)+CHR$(131)+CHR$(143)
1020 CH$(8)=CHR$(137)+CHR$(131)+CHR$(141)
1021 CH$(9)=CHR$(143)+CHR$(142)+CHR$(135)
1022 CH$(10)=CHR$(142)+CHR$(135)+CHR$(143)
1023 CH$(11)=CHR$(131)+CHR$(131)+CHR$(135)
1030 CH$(12)=CHR$(131)+CHR$(130)+CHR$(135)
1031 CH$(13)=CHR$(142)+CHR$(132)+CHR$(143)
1032 CH$(14)=CHR$(143)+CHR$(143)+CHR$(133)
1033 CH$(15)=CHR$(131)+CHR$(131)+CHR$(143)
1040 CH$(16)=CHR$(143)+CHR$(136)+CHR$(143)
1041 CH$(17)=CHR$(137)+CHR$(138)+CHR$(143)
1042 CH$(18)=CHR$(131)+CHR$(130)+CHR$(135)
1043 CH$(19)=CHR$(143)+CHR$(139)+CHR$(143)
1050 CH$(20)=CHR$(129)+CHR$(131)+CHR$(135)
1051 CH$(21)=CHR$(131)+CHR$(131)+CHR$(141)
1052 CH$(22)=CHR$(141)+CHR$(143)+CHR$(133)
1053 CH$(23)=CHR$(139)+CHR$(131)+CHR$(143)
1060 CH$(24)=CHR$(142)+CHR$(131)+CHR$(143)
1061 CH$(25)=CHR$(132)+CHR$(140)+CHR$(143)
1062 CH$(26)=CHR$(133)+CHR$(143)+CHR$(133)
1063 CH$(27)=CHR$(139)+CHR$(131)+CHR$(143)
1070 CH$(28)=CHR$(131)+CHR$(131)+CHR$(133)
1071 CH$(29)=CHR$(143)+CHR$(137)+CHR$(143)
1072 CH$(30)=CHR$(143)+CHR$(133)+CHR$(143)
1074 CH$(31)=CHR$(143)+CHR$(135)+CHR$(143)
1080 CH$(32)=CHR$(137)+CHR$(131)+CHR$(141)
1081 CH$(33)=CHR$(134)+CHR$(140)+CHR$(135)
1082 CH$(34)=CHR$(133)+CHR$(143)+CHR$(133)
1083 CH$(35)=CHR$(139)+CHR$(131)+CHR$(143)
1090 CH$(36)=CHR$(137)+CHR$(131)+CHR$(141)
1091 CH$(37)=CHR$(134)+CHR$(140)+CHR$(133)
1092 CH$(38)=CHR$(143)+CHR$(142)+CHR$(135)
1093 CH$(39)=CHR$(139)+CHR$(135)+CHR$(143)
1100 CH$(40)=CHR$(143)+CHR$(143)+CHR$(143)
1101 CH$(41)=CHR$(143)+CHR$(143)+CHR$(143)
1102 CH$(42)=CHR$(142)+CHR$(141)+CHR$(143)
1103 CH$(43)=CHR$(139)+CHR$(135)+CHR$(143)
2000 RETURN

```

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PAPER FOR TI20/TI40
PRINTER/PLOTTERS

Mr John Radziejowski informs me that these are
available at The Calculator Shop in the Elizabeth
Street Arcade in Brisbane. This could be helpful
for local OOPs.
Size is 114 mm wide by about 50 mm diameter
for \$1.40 per roll.
(VZ).

**** ENHANCED BASIC CLS ****

I made a boo-boo in LE'VZ #17 in that I did not print all
of the M/L routine in Larry Taylor's article. This concludes
his article. SORRY.

(J.D.)

```

0033 ;
0034 ;START OF THE PROCESSING
0035 ;ROUTINE FOR NEW COMMAND.
0036 ;
0037 NVCT EXX ;SAVE ALL REGISTERS
0038 LD HL,1D5BH ;CHECK TO
0039 POP DE ;SEE IF THE
0040 OR A ;RETURN
0041 SBC HL,DE ;ADDRESS
0042 PUSH DE ;IS 1D5BH
0043 EXX ;RESTORE ALL REGISTERS
0044 JP NZ,1D7BH ;IF NOT GO TO NORMAL PROCESSING
0045 PUSH HL ;SAVE STRING ADDRESS
0046 CALL 1D7BH ;GET NEXT VALUE FROM STRING
0047 JR NZ,CONT ;IF NOT ZERO THEN CONTINUE
0048 POP POP HL ;ELSE RESTORE STRING ADDRESS
0049 LD DE,(VCTR) ;RETRIEVE ORIGINAL VECTOR
0050 PUSH DE ;AND JUMP
0051 RET ;TO IT
0052 CONT CP B4H ;CHECK FOR CLS TOKEN
0053 JR NZ,POP ;IF NOT FOUND RETURN TO CALLER
0054 INC HL ;MOVE TO NEXT VALUE IN STRING
0055 LD A,(HL) ;GET NEXT VALUE AFTER CLS TOKEN
0056 SUB 30H ;REDUCE IT TO RANGE 0-B
0057 JR Z,EXEC ;IF ZERO THEN EXECUTE COMMAND
0058 LD B,B ;LOAD B REG WITH UPPER LIMIT
0059 CMPR CP B ;CHECK IF A=B
0060 JR Z,EXEC ;IF YES THEN EXECUTE COMMAND
0061 DJNZ CMPR ;REDUCE B AND CONTINUE CHECK
0062 JR POP ;NO MATCH SO RETURN TO CALLER
0063 EXEC POP DE ;RETRIEVE OLD STRING ADDRESS
0064 POP DE ;RETRIEVE OLD RETURN ADDRESS
0065 LD DE,1D1EH ;LOAD NEW RETURN ADDRESS
0066 PUSH DE ;SAVE NEW RETURN ADDRESS
0067 INC HL ;MOVE TO NEXT VALUE IN STRING
0068 PUSH HL ;SAVE CURRENT STRING ADDRESS
0069 ADD A,A ;MULTIPLY CLS
0070 ADD A,A ;VALUE BY 16 TO
0071 ADD A,A ;CALCULATE THE
0072 ADD A,A ;COLOUR OFFSET
0073 JR NZ,SKIP ;IF RESULT NOT ZERO THEN SKIP
0074 INC A ;IF ZERO INCREASE TO ONE
0075 SKIP ADD A,7FH ;ADD 127 TO GET GRAPHICS BLOCK
0076 ;
0077 ;CLEAR SCREEN ROUTINE
0078 ;
0079 LD HL,7000H ;LOAD START OF SCREEN ADDRESS
0080 LD (7B20H),HL ;SET CURSOR POSITION
0081 LD DE,7001H ;LOAD START OF SCREEN PLUS ONE
0082 LD BC,01FFH ;NUMBER OF BYTES TO MOVE
0083 LD (HL),A ;LOAD GRAPHICS BLOCK INTO HL
0084 LDIR ;DO A BLOCK FILL OF THE SCREEN
0085 POP HL ;RETRIEVE STRING ADDRESS
0086 RET ;RETURN TO 1D1EH TO CONTINUE
0087 ENDP DEFB 0 ;END OF PROGRAM MARKER

```

World Expo 88

BRISBANE, AUSTRALIA. APRIL 30-OCTOBER 30

STOCK CONTROL PROGRAMME.

By Mr. David Martin. Part one.

David wrote this to help his father in his landscaping business. It is Public Domain and can still be improved upon. Perhaps YOU can adapt it for your own use.

```

8 GOTO50
10 REM SEARCH ON NO
12 FOR I=0 TO NO-1
14 IF VAL(B$)=0 THEN NEXT
16 IF VAL(B$)=A(I,4) THEN RETURN
18 NEXT I
20 RETURN
50 REM STOCKLIST VER 1.9 BY D MARTIN 22/8/86
70 CLEAR5000
80 B$="":G$="":P$=""
90 L$="=====
105 Z$="ENTER PRODUCT:-"
110 DIMA$(150),S$(150)
115 DIMA(150,9)
130 GOTO200
150 IF P<0 THEN A(I,N)=0:RETURN
160 IF P<0 THEN A(I,N)=P
161 RETURN
200 CLS:Z=0
210 PRINT@B,"STOCK CONTROL"
220 PRINT"OPTIONS:-"
230 PRINT"0 PRINT REF CODES & SUPPLIERS"
240 PRINT"1 ENTER/CHANGE STOCK ITEM"
250 PRINT"2 VIEW ITEM DETAILS"
260 PRINT"3 DELETE OLD STOCK ITEM"
270 PRINT"4 SALES"
280 PRINT"5 ORDER STOCK"
290 PRINT"6 ENTER STOCK RECEIVED"
300 PRINT"7 PRINT ITEMS TO RE-ORDER"
310 PRINT"8 SAVE STOCK FILE"
315 PRINT"9 VIEW NAMES IN FILE"
320 PRINT"CHOOSE OPTION (0-9)"
330 PRINT"OR HIT (SPACE) FOR MORE OPTIONS"
340 IF INKEY$<>"" THEN 340
350 IF INKEY$="" THEN 350
360 O$=INKEY$
361 SOUND30,1
365 IF O$="" THEN 500
370 IF O$<"0" OR O$>"9" THEN 340
380 I=VAL(O$)
385 IF I=0 THEN 9000
390 IF I=1 THEN 1000
400 IF I=2 THEN 2000
410 IF I=3 THEN 3000
420 IF I=4 THEN 4000
430 IF I=5 THEN 5000
440 IF I=6 THEN 6000
450 IF I=7 THEN 7000
460 IF I=8 THEN 8000
470 IF I=9 THEN 12000
500 CLS
501 PRINT@B,"STOCK CONTROL"
502 PRINT"OPTIONS:-"
503 PRINT"1 ENTER STOCK FILE"
504 PRINT"2 END PROGRAM"
505 PRINT"3 TO TOTAL THIS FILE"
506 PRINT"4 TO PRINT STOCKLIST"
550 PRINT"CHOOSE OPTION (1-4)"
555 PRINT"OR HIT (SPACE) FOR MORE OPTIONS"
560 IF INKEY$<>"" THEN 560
570 IF INKEY$="" THEN 570
580 IF INKEY$="" THEN 200
600 O$=INKEY$
610 IF O$<"1" OR O$>"4" THEN 560
620 I=VAL(O$)
630 IF I=1 THEN 10000
640 IF I=2 THEN PP=10:GOTO8010
650 IF I=3 THEN 15000
660 IF I=4 THEN 19000
1000 CLS
1005 IF NO=150 THEN 1070
1010 PRINT Z$;
1020 INPUT B$:IF B$="" THEN 200
1025 IF ASC(B$)>57 OR ASC(B$)<49 THEN 1030
1026 GOTO2500
1030 FOR I=0 TO NO-1
1040 IF A$(I)=B$ THEN Z=0:GOTO2085
1050 IF A$(I)="" THEN NO=NO+1:GOTO1110
1060 NEXT I
1070 PRINT"NO MEMORY LEFT"
1075 PRINT@384,"PRESS ANY KEY TO RETURN TO MENU"
1076 IF INKEY$<>"" THEN 1076
1077 IF INKEY$="" THEN 1077
1078 CLS:GOTO210
1090 GOTO1075
1110 A$(I)=B$
1112 PRINT@32,"PART # ";A(I,4);:INPUT A:IFA=0 THEN A=A(I,4)
1114 FORB=0 TO NO-1
1115 IFB=I THEN NEXT
1116 IFA(G,4)=A THEN PRINT"# IN USE ":GOTO1112
1118 NEXT:A(I,4)=A
1120 PRINT@64,"AMOUNT IN STOCK ";A(I,0);:INPUT P
1122 N=0:GOSUB150
1140 IFA(I,0)<0 THEN 1120
1160 PRINT@96,"AMOUNT ON ORDER ";A(I,1);:INPUT P
1170 N=1:GOSUB150
1180 IFA(I,N)<0 THEN 1160
1200 PRINT@128,"RE-ORDER LEVEL ";A(I,2);:INPUT P
1210 N=2:GOSUB150
1220 IFA(I,N)<0 THEN 1200
1230 PRINT@160,"W/SALE PRICE ";A(I,5);:INPUT P:N=5:GOSUB150
1235 PRINT@192,"TAX RATE ";A(I,6)*100;:INPUT P:P=P/100:N=6
1236 GOSUB150
1240 PRINT@224,"RETAIL PRICE ";A(I,7);:INPUT P:N=7:GOSUB150
1280 PRINT@256,"SUPPLIER:-";S$(I);
1290 INPUT G$:IF G$<>"" THEN S$(I)=G$
1320 PRINT"ANY FURTHER NEW ITEMS(Y/N)"
1330 IF INKEY$<>"" THEN 1330
1340 IF INKEY$="" THEN 1340
1350 Y$=INKEY$
1360 IF Y$="Y" THEN 1000 ELSE 200

```

GOTO PAGE SEVEN.

```

2000 CLS:IFZ=999THEN3000
2005 Z=99
2010 PRINTZ$;" OR NUMBER "
2020 INPUTB$:IFB$=""THEN200
2025 IFASC(B$)>57ORASC(B$)<49THEN2040
2026 GOTO2500
2040 FORI=0TOND-1
2050 IFA$(I)=B$THEN2080
2060 NEXTI
2070 PRINT"WRONG INFO ENTERED PRESS RETURN"
2075 INPUTW
2076 GOTO200
2080 IFZ=999THEN3000
2085 CLS:K%=0
2086 IFI>=NDGOTO200
2087 IFI<0GOTO200
2090 PRINT"PRODUCT: ";A$(I)
2100 PRINT"PART # ";A(I,4)
2110 PRINT"STOCK IN HAND ";A(I,0)
2120 PRINT"STOCK ON ORDER ";A(I,1)
2130 IFA(I,2)>A(I,0)THENA(I,3)=A(I,2)-A(I,0)-A(I,1)ELSEA(I,3)=0
2131 A(I,8)=(A(I,5)+(A(I,5)*A(I,6)))A(I,0)
2132 A(I,9)=A(I,7)*A(I,0)
2135 IFA(I,3)<0THENA(I,3)=0
2137 IFK%=1THENRETURN
2140 PRINT"RE-ORDER LEVEL ";A(I,2)
2150 PRINT"RE-ORDER QUANTITY ";A(I,3)
2155 PRINT"W/Sale ";USING"#####.##";A(I,5);
2156 PRINT"+TAX";USING"#####.##";A(I,5)+(A(I,5)*A(I,6))
2160 PRINT"RETAIL ";USING"#####.##";A(I,7);
2161 PRINT"-TAX";USING"#####.##";A(I,7)-(A(I,5)*A(I,6))
2165 PRINT"SUPPLIER ";S$(I)
2166 PRINT"TOTAL W/Sale";USING"#####.##";A(I,8)
2167 PRINT"TOTAL RETAIL";USING"#####.##";A(I,9)
2169 IFZ=996GOTO2175
2170 PRINT@352,"PRESS A)>>>) TO CHANGE."
2175 PRINT@384,"PRESS Hw) FOR NEXT RECORD"
2176 PRINT@416,"PRESS vvy) FOR PREVIOUS RECORD"
2180 PRINT@448,"ANY OTHER KEY TO RETURN TO MENU"
2190 IFINKEY$<>" "THEN2190
2200 IFINKEY$=""THEN2200
2205 IFZ=996GOTO2215
2210 IFINKEY$="C"THENCLS:PRINT"PRODUCT DETAILS: -"A$(I):GOTO1112
2215 IFINKEY$="N"THENI=I+1:GOTO2085
2216 IFINKEY$="P"THENI=I-1:GOTO2085
2220 CLS:GOTO200
2500 REM SEARCH ON NUMBER
2510 GOSUB10
2520 IFVAL(B$)=A(I,4)THEN2080
2540 GOTO2070
3000 Z=0:CLS:PRINTZ$;" OR NUMBER"
3010 INPUTB$:IFB$=""THEN200
3020 IFASC(B$)>57ORASC(B$)<49THEN3030
3022 GOTO3500
3030 FORI=0TOND-1
3040 IFA$(I)=B$THEN3070
3050 NEXTI
3060 Z=999:GOTO2070
3070 PRINT"PRESS (0) TO ANY OTHER KEY FOR MENU"
3081 IFINKEY$<>" "THEN3081
3082 IFINKEY$=""THEN3082
3083 IFINKEY$="D"THEN3089ELSE200
3089 A$(I)=""
3090 S$(I)=""
3110 FORK=0TOD
3120 A(I,K)=0
3130 NEXTK
3140 FORT=ITOND-1
3141 A$(T)=A$(T+1)
3142 S$(T)=S$(T+1)
3143 A(T,0)=A(T+1,0):A(T,1)=A(T+1,1):A(T,2)=A(T+1,2)
3144 A(T,3)=A(T+1,3):A(T,4)=A(T+1,4):A(T,5)=A(T+1,5)
3145 A(T,6)=A(T+1,6):A(T,7)=A(T+1,7):A(T,8)=A(T+1,8)
3146 A(T,9)=A(T+1,9)
3147 NEXTT
3150 ND=ND-1
3155 IFND<1THENND=0:GOTO200
3170 Z=0: GOTO200
3500 REM SEARCH ON NUMBER
3510 GOSUB10
3520 IFVAL(B$)=A(I,4)THEN3070
3540 GOTO3060
4000 CLS:PRINTZ$;" OR NUMBER "
4020 INPUTB$
4030 IFB$=""THEN200
4032 IFASC(B$)>57ORASC(B$)<49THEN4040
4034 GOTO4200
4040 FORI=0TOND-1
4050 IFA$(I)=B$THENCLS:GOTO4090
4060 NEXT I
4070 GOTO2070
4090 PRINTA$(I)," # ";A(I,4)
4092 PRINT"TOTAL STOCK=";A(I,0)
4095 PRINT"ENTER NUMBER SOLD"
4100 INPUTA
4110 IFA<0THEN4100
4112 IFA=0THEN200
4115 IFA(I,0)-A<0THENPRINT"*****":GOTO4140
4120 IFA>A(I,0)ANDA(I,1)>0THENPRINT"AWAITING DELIVERY OF ";B$
4125 IFA(I,0)+A(I,1)<0APRINT"ORDER";ABS(A(I,0)+A(I,1)-A);"OF";B$
4130 A(I,0)=A(I,0)-A
4135 PRINT"SOLD ";A;" # ";A$(I):K%=1:GOSUB2130
4140 PRINT"ANY OTHER STOCK SOLD (Y/N) "
4150 IFINKEY$<>" "THEN4150
4160 IFINKEY$=""THEN4160
4170 IFINKEY$="Y"THEN4000ELSE200
4200 REM SEARCH ON NUMBER
4210 GOSUB10
4220 IFVAL(B$)=A(I,4)THENCLS:GOTO4090
4240 CLS:PRINT"NUMBER NOT FOUND PRESS RETURN FOR MENU"
4250 INPUTVV:GOTO200
5000 CLS:PRINTZ$;" OR NUMBER"
5020 INPUTB$
5030 IFB$=""THEN200
5040 IFASC(B$)>57ORASC(B$)<49THEN5050
5042 CLS:GOTO5500
5050 FORI=0TOND-1
5060 IFA$(I)=B$THEN5110
5070 NEXTI
5080 PRINT"PRODUCT NOT FOUND PRESS RETURN":INPUTFF:GOTO200
5110 PRINTA$(I)," # ";A(I,4)
5115 PRINT"AMOUNT ALREADY ON ORDER ";A(I,1)
5120 PRINT"ENTER AMOUNT FOR ORDER"
5130 INPUTA
5140 IFA<0THEN5130
5150 PRINT"ORDER FOR ";A;" OF "

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*** COMPETITION ***

BY JEREMY LEE.

Hi. I am interested in running a competition for the VZ-200/300 involving the programming skill of the user. To find out whether it is worth my while, I would like all who are interested to write to me or care of the club, (the addresses are below) and if enough people are interested, a rules notice will be posted out. If not, a notice will be posted in LE'VZ. It's not too hard, and a entry fee of \$2 is required (after postage of rules with entry form).

Mr Jeremy Lee, c/o P.O. Box 221, ASHGROVE. QLD. 4060.
 AUSTRALIA or : Enclose a S.A.S.E.
 C/O. Bob Jones, BVZUW,
 63 Tingalpa St. WYNNUM WEST. 4178. QLD. AUSTRALIA.

*** WORD PUZZLE. ***

Here is a little puzzle to give you a rest from programming. There are sixteen words hidden amongst the letters. The words are of different length, mostly computer related and are printed in any direction. That is horizontal, vertical, diagonal and perhaps zig-zag fashion. The answer print in on page 12. Have fun.

BOTNZSIFQPBWEGW
 SCJMAGAZINEFBCQ
 KOWNOBBIREOIEOU
 IMONITORDOCRJRI
 IPEXPOBETEUOBRC
 NIFJDABBNTUPIEK
 GLBZSUATARABTSW
 JEEIGLELNSBAKPR
 IRCGLNCACOPXXOI
 GIEJINLAGFSXGNT
 URBAEWLJXYBLNDE
 LTLMIJEPJQYCHEP
 FZOFKMDGLEKWQNH
 INWBAELCZEQIDCF
 UFMNPMRTAKFEUEO

CORRESPONDENCE
 NOMENCLATURE
 BICENTENIAL
 QUICKWRITE
 FOOTBALL
 DEBUGGER
 COMPILER
 MAGAZINE
 MONITOR
 JOURNAL
 SKIING
 PASCAL
 RIBBON
 BASIC
 EXPO
 BIT

--- HINTS- HINTS- HINTS---

Mr David Garnsworthy invites readers to buy **Goldsoft** A\$4.50 per month from a Tandy store. The MC10 programmes convert easily. For the various graphics programmes, insert **MODE(1)**. The ECB 32k programmes using text easily fit within 22k of a VZ.

Mr Ken Brazier advises that the early DSE **Omnibus** books do have some bugs printed in the programmes, but DSE have issued correction sheets. Ask your DSE store.

I would like to let folk know that the VZ Data Recorder audio cable with the two 3.5mm plugs on one end and a stereo plug on the other, can be purchased from Many electronics parts stores. In Brisbane they are available from Delsound Pty Ltd for \$2.95, with the ARISTA brand name.

QUICKWRITE WORD PROCESSOR V4.

EXTRA GOOD NEWS!!!

We will be releasing Version V4 in December. This does not mean that Version V3 is obsolete. Version V3 will still be current, as they are two different units. This is being printed with V4, hence the different type face styles.

See our software on page 14 for more details on V4. The main differences being that the user designs a library of type face styles and saves them to disc. The other is that the change of typeface style can be achieved anywhere in the text.

We hope to produce a VHS VIDEO demonstrating both V4 and V3, please let us know if you would like to view one.

Owners of V3 can purchase V4 at a discount price of **AUD\$20.00**, otherwise the price is **AUD\$40.00**.

As stated elsewhere, YOU have to familiarise yourself with the control codes of your printer. It is not possible for these to be printed in the QUICKWRITE MANUAL as there are quite a few variations. I have owned this Citizen 120-D printer for almost a year and I am still learning how to use it.

For owners of V3, you will be receiving an "Upgrading Memo" shortly. There is a problem when using the older type printer interfaces. The printer control codes cannot be sent to the printer although the text is OK. If YOU are having this trouble, please let us or Mr.L.Milburn know about it, as I can assure you that it is really worthwhile getting

QUICKWRITE operating smoothly.

QUICKWRITE IS ONLY OBTAINABLE FROM US.

All discs are numbered and operating manuals have multicoloured printing.

VSOFTWAREZ. J.D.

***** CHRISTMAS MINI-EXPO. *****

As mentioned in my Editorial, I will be combining this with the BVZUW meeting in December. The date is Saturday the 5th. and the address: Capalaba State High School, School Rd. CAPALABA.

TIME 9 am. to about 5 pm.

Bob Jones suggests that the usual BVZUW official part of the workshop should be waived for the day.

All folk are welcome, whether an OOP, BVZUW member or a visitor. Even non-computerists will be catered for.
 FREE ENTRY FOR ALL.

THERE WILL BE:

- * A lucky door prize.
- * A video recorder set up to demonstrate software and show some items that are not VZ related.
- * About ten different VZ systems running.
- * Continious software demonstrations.
- * Software for sale at discount prices.
- * Books and magazines for sale.
- * A box of old hardware items for the taking.
- * Voice sythesisers with talking VZs.
- * Free and Public Domain software.
- * An opportunity for all folk to sell VZ equipment.
- * Show and demonstrate your favourite item/s.
- * Convenience store nearby for peckish folk.
- * Plenty of parking.
- * * * And much more. (VZ).

Contact me for details. John D'Alton.

Bob Kitch's information list Part 1 -

Pages one to six in this LE'VZ. Part 2 to conclude are pages seven to eight, will be printed in LE'VZ #19.

(J.D.)

Page 1 of 8

LISTING OF VZ200/300 MAGAZINE ARTICLES - as at 15/09/87

Since its introduction in early 1983, over two hundred articles on the VZ-200 and 300 have appeared in the magazines. Some articles review the hardware and others describe peripherals. Some excellent games have been published and a very useful set of utility routines have emerged.

This bibliography for the VZ computer is a must for the serious VZ-User.

Compiled by:-

R.B. KITCH, 7 Eureka St., Kenmore, Qld. 4069. Phone: (07)378-3745.
PLEASE ADVISE OF ANY ADDITIONAL ARTICLES ..or.. CHANGES, ALTERATIONS OR BUGS IN LISTINGS to assist other Users.

UTILITIES

Oct.	83	APC	52,4	BASIC program conversion. (Surya)	(2)
Jan.	84	APC	20-21	Beginners tips. (White)	(-)
Nov.	83	APC	57,9	Program conversion Pt. 2 (Surya)	(2)
Nov.	83	APC	89-95	BASIC converter chart. (Surya)	(7)
Feb.	84	APC	140-1	Program conversion Pt. 2 (Surya)	(2)
Mar.	84	APC	42-3	Program conversion - Apple II (Surya)	(1)
Apr.	84	APC	71-2	Program conversion - TRS 80/System 80 (Surya)	(2)
May	84	APC	75-6	Program conversion - Atari (Surya)	(1)
Jun.	84	APC	67	Program conversion - Sinclair (Surya)	(1)
Jul.	84	APC	129-30	Program conversion - BBC (Surya)	(2)
Mar.	84	ETI	63	More functions for the VZ-200. (Olney)	(1)
Apr.	85	ETI	117	Notes and errata for Olney.	(-)
Jul.	84	BB	56	Some more routines. (Middlemiss)	(1)
Jul.	84	M80	3-4	VZED - three new functions.	(1)
Aug.	84	M80	2	VZ-200 output latch.	(1)
Aug.	84	M80	9,15,16	Memory peek VZED. (Carson)	(1)
Aug.	84	M80	3-4	Microsoft ROM BASIC Level I bug.	(1)
Apr.	85	APC	97	VZ-200 bug. (Tritscher)	(-)
Aug.	85	APC	31	VZ bug. (Tritscher)	(1)
Aug.	84	APC	94	VZ-200 moving message and trace. (Batterson)	(1)
Nov.	84	APC	76	Trace function. (Brefit)	(-)
Nov.	84	APC	125	VZ-200 correction. (Kelly)	(-)
Sep.	84	CI	19	VZ200 Input. (Woolf)	(1)
Sep.	84	BB	63	Poking extra functions. (Clark & Hill)	(1)
Oct.	84	ETI	135-7	Extending VZ-200 BASIC. (Olney)	(3)
Nov.	84	APC	125-6	TRON/TROFF function for VZ-200. (Thompson)	(1)
Nov.	84	APC	208-12	MON-200 machine code monitor. (Stamboulidas)	(5)
Nov.	84	PCG	55-56	Lprinter. (Quinn)	(2)
Nov.	84	PCG	suppl.	VZ-200 reverse video.	(1)
Dec.	84	BB	64	Enlarged characters. (Velde)	(1)
Feb.	85	APC	171	BASIC understanding. (Hobson)	(1)
Feb.	85	APC	20	VZ-200 into puberty - Olney's extended BASIC.	(1)
Feb.	85	ARA	19-26	Calculating grey line. (Baker)	(6)
Mar.	85	CI	12-14	Remember. (Marsden)	(3)
Apr.	85	PCG	62-64	Find. (Stamboulidas)	(1)
Apr.	85	APC	19	Use of RND in dice and card games. (Holland)	(1)
Apr.	85	APC	103	VZ variable definition. (Stamboulidas)	(1)

Apr.	85	APC	95	Variable GO TO on VZ. (Olsen)	(1)
Jul.	85	APC	176	Correction to VZ variable GO TO.	(-)
May	85	APC	52-3	Lysco support for VZ-200. (Young)	(1)
May	85	ETI	99-101	VZ-200 hardware interrupt. (Olney)	(3)
May	85	APC	110	Background VZ. (Williams)	(1)
Aug.	85	APC	130	VZ-200 instant colour. (Willows)	(-)
Aug.	85	APC	130-3	Reversed REM. (Quinn)	(1)
Sep.	85	APC	145	Real-time clock. (Griffin)	(1)
Oct.	85	APC	218	APC benchmark BASIC programs.	(1)
Oct.	85	APC	147	VZ deletions. (Quinn)	(1)
Nov.	85	APC	189	VZ EDITOR/ASSEMBLER tips. (Lam)	(1)
Nov.	85	ETI	94-5	Olney's Level II BASIC for VZ200/300. (Rowe)	(2)
Jan.	86	APC	83,5	VZ user graphics.	(1)
Feb.	86	APC	127	Machine language calls.	(1)
Mar.	86	APC	chart	APC BASIC converter chart 1986.	(8)
Mar.	86	VC	103-5	VZ-200 cassette inlays. (Dutfield)	(3)
May	86	APH	54-55	VZ and photography. (Kohen)	(2)
Jun.	86	APC	209	VZ pause.	(1)
Aug.	86	ETI	86-89	VZ software mods. (CHIP-8 Editor) (Griffin)	(3)
Oct.	86	ETI	28-33	VZ CHIP-8 Interpreter. (Griffin)	(5)
Sep.	86	AEM	89-92	Screen handling on VZ. Part I. (Kitch)	(4)
Oct.	86	AEM	110-112	Screen handling on VZ. Part II. (Kitch)	(4)
Oct.	86	AEM	113,4,21	Reference list of VZ articles. (Kitch)	(2)
Oct.	86	ETI	47	Labeller. (Gallagher)	(1)
Oct.	86	ARA	38-42	Amateur radio logger. (Johnson)	(5)
Nov.	86	EA	35	Speaker enclosure calculator. (Allison)	(1)
Dec.	86	AEM	90-95	Memory mapping on VZ. (Kitch)	(6)
Mar.	87	AR	10-12	Feedline calculations. (Buhre)	(3)
Apr.	87	EA	100-101	Op amp noise. (Allison)	(2)
Apr.	87	ARA	20-24	Beam Headings. (Baker)	(5)
May	87	AEM	86-88	VZ Epson printer patch. (Taylor)	(3)
Jun.	87	AEM	74,75,79	VZ Epson printer patch Pt II.	(3)
Aug.	87	AEM	82-83	VZ expanded EPROM (Meager)	(2)

GAMES

Nov/Dec83	83	SYN	22-24	Projectile Plotting (Grosjean)	(2)
Dec.	83	APC	161-3	Missile Command. (Whitwell)	(2)
Feb.	84	BB	50-51	Caddy and Reaction Test. (Hartnell)	(2)
Jan.	84	YC	65	Graphic Sine Waves for VZ-200. (Nickasen)	(1)
Apr.	84	APC	178-80	Moon Lander. (Alley)	(2)
Jul.	84	APC	174-8	Blockout. (Pritchard)	(3)
Jul.	84	M80	7,22	Battleships. (Carson)	(1)
Jul.	84	M80	7,20,21	Junior Maths. (Carson)	(2)
Aug.	84	M80	9,16	Contest Log VZED. (Carson)	(1)
Aug.	84	M80	9,16,17	Dog Race VZED. (Carson)	(1)
Oct.	84	PCG	55-7	High Resolution Graphics Plotting. (Thompson)	(3)
Nov.	84	PCG	82	Tips for 'Ladder Challenge', 'Panik' and 'Astroids'.	(1)
Jan.	85	PCG	54	POKE's to 'Ghost Hunter'.	(-)
Mar.	85	BYC	146-7	Golf Simulation. (McCleary)	(2)
Mar.	86	CFG	4-5	Golf Simulation. (McCleary)	(-)
Mar.	85	BYC	147	Knight's Cross. (Lucas)	(1)
Jan.	85	APC	129-31	Sketcher. (Leon)	(3)
Jan.	85	VC	88-89	Punch. (Rowe)	(2)
Jan.	85	PCG	44-48	Space Station Defender. (Shultz)	(5)
Feb.	85	CI	27-28	Lost. (Potter)	(2)
Mar.	85	YC	105-9	Decoy. (Rowe)	(2)
Mar.	85	CI	-	Mouse Maze. (Crandall)	(1)

GOTO PAGE 10.

Apr.	85	YC	160	Painter. (Daniel)	(1)
Apr.	85	PCG	65-7	Roadrace. (Thompson)	(3)
May	85	YC	106	Number Sequence. (Thompson)	(1)
May/Jun	85	PCG	63-7	Sketchpad. (Thompson)	(5)
Jun	85	YC	70	Morse Tutor program. (Heath)	(1)
Jan.	86	YC	150-1	Morse Tutor - again. (Heath)	(2)
Jul.	85	YC	81	Electric Tunnel. (Daniel)	(1)
Aug.	85	YC	114	Number Slide. (Daniel)	(1)
Oct.	85	PCG	47-52	Cube. (McMullan)	(6)
Oct.	85	YC	105-7	Yahtzee. (Thompson)	(3)
Mar.	86	APC	208-9	VZ Frog. (Alley)	(1)
May	86	ETI	93	Balloon Safari, The Drop and Flatten. (Sheppard)	(1)
Jul.	86	YC	75	Simon. (Proctor)	(1)

BUSINESS

Aug.	84	APC	172-7	Database VZ-200. (Barker)	(6)
Oct.	84	APC	214	WP for VZ-200. (McQuillan)	(-)
Oct.	85	APC	82-3	Comment on Barker's and Quinn's DB. (Lukes)	(-)
Oct.	84	APC	126-30	Minicalc Spreadsheet. (Stamboulidas)	(5)
Dec.	84	APC	214	Correction to Minicalc.	(1)
May	85	APC	162-3	Micro Type(WP). (Browell)	(2)
Jul.	85	APC	164-6	Database. (Quinn)	(2)

PERIPHERALS

Feb.	84	EA	131-2	Real-world interface.	(1)
Aug.	84	EA	65	Improved graphics on VZ-200. (Dimond)	(1)
Aug.	84	PCG	83	I/O card for VZ-200. (ad)	(1)
Oct.	84	APC	214	Serial help request. (Pope)	(1)
Dec.	84	APC	36	Add-ons for VZ-200. (Bleckendorf)	(-)
Oct.	85	YC	140	VZ200/300 Modem. (ad)	(-)
Nov.	84	BI	3,4	RTTY with VZ200. (Keatinge)	(2)
Nov.	84	ETI	106-12	A 'Glass-Teletype' using the VZ-200 Pt I	(7)
Dec.	84	ETI	93-7	" " Pt II	(5)
Aug.	85	ETI	72-8	VZ-200 terminal.	(7)
Jun.	86	EA	106	VZ serial terminal. (ad DSE kit K6317)	(-)
Sep.	85	AR	10-11	Another RTTY. (Butler)	(2)
Jan.	86	AR	19-20	Morse on RTTY. (Butler)	(2)
Feb.	86	ETI	72-4	Modifying VZ-200 16K memory expansion. (Olney)	(3)
Mar.	86	ETI	48	Talking VZ-200. (Bennets)	(1)
Jul.	86	ETI	55-60	Talking VZ-200 hardware modifications. (Sorrell)	(6)
Oct.	86	ETI	14	Errata for Super II.	(-)
Jan.	87	EA	60	EPROM programmer modification. (Buhre)	(1)
Feb.	87	AR	16-17	Morse interface. (Forster)	(2)
May	87	EA	51	16K Memory Expansion VZ300. (Kosovich)	(1)
Jun.	87	EA	129	Errata Memory Expansion.	(-)
Jun.	87	AEM	8	VZ software. (Thompson)	(1)

COMMERCIAL SOFTWARE REVIEWS

Mar.	84	APC	190-1	Review of DSE 'Matchbox', 'Biorhythms', 'Circus' and 'Poker'. (Davies)	(2)
Aug.	84	PCG	46-47	Review of DSE 'Panik' and 'Ladder Challenge'.	(1)
Oct.	84	PCG	90-91	Review of DSE 'Knights and Dragons', 'Ghost Hunter', 'Othello', and 'Invaders'.	(2)

Nov.	84	PCG	90-96	Review of LYSCO 'Cub Scout' and DSE 'Dracula's Castle'.	(1)
Jan.	85	PCG	65	Review of DSE 'Air Traffic Controller' and 'Tennis'.	(1)
Feb.	85	PCG	75	Review of DSE 'Defence Penetrator' and 'Star Blaster'.	(1)
Mar.	85	PCG	76-77	Review of DSE 'Planet Patrol' and 'Learjet'.	(1)
Apr.	85	PCG	94-99	Review of DSE 'Asteroids', 'Super Snake' and 'Lunar Lander'.	(1)
Apr.	85	ETI	103	Logbook and Morse on VZ-200.	(1)
Oct.	85	PCG	68-9	Review of DSE 'Duel'.	(1)
Nov.	85	PCG	70-1	Review of DSE 'Attack of the Killer Tomatoes'.	(1)
Nov.	85	CLC	31	Review of educational software.	(1)

SOFTWARE ADVERTISEMENTS

A 12 page compilation of ads. for a variety of software, services, User groups etc.

HARDWARE REVIEWS

Apr.	83	YCU	56-59	Textet TX-8000. (Bennett)	(3)
Apr.	83	APC	58-66	VZ-200. (Hartnell)	(5)
Apr.	83	CC	38-43	Review of VZ-200.	(3)
May	83	CC	26-30	Video Technology VZ-200 PC. (Ahl)	(3)
Jun.	83	EA	137	New low-cost computer - VZ-200.	(1)
Jun.	83	ETI	30	Dick Smith colour computer.	(1)
Jun.	83	YC	6	DSE VZ-200.	(-)
Aug.	84	PCG	12	VZ-200.	(-)
Jul.	83	ETI	32-7	DSE's personal colour computer. (Harrison)	(3)
Jul.	83	EA	130-3	The VZ-200: colour, graphics and sound. (Vernon)	(4)
Jul.	83	PCN	16	Timing the Laser's phazer. (Stokes)	(1)
Sep.	83	WM	40	Laser.	(-)
Sep.	83	BB	18-20	Dick Smith VZ200: good value. (Fullerton)	(3)
Aug.	83	YC	20-33	Cash and Carry Computers. (Bell)	(9)
Sep.	83	CC	202-4	Review of VZ-200 and PP40.	(1)
Oct.	83	APC	77-8	VZ-200.	(1)
Oct.	83	WM	135	Textet TX8000.	(1)
Oct.	83	CT	12	The Laser 200.	(-)
Dec.	83	CT	11	Laser 200.	(-)
Nov.	83	CT	37-40	A look at the Laser. (Green)	(4)
Nov.	83	WM	42-108	The Laser - a shot in the dark.	(3)
Nov/Dec	83	SYN	17-22	VZ-200. (Ahl)	(2)
Feb.	84	CC	218-21	Laser PP40 Printer/Plotter.	(3)
Spring	84	MC	52-4	Laser 200. (Green)	(3)
Jun.	84	EA	12-9	Buying your first computer. (Vernon)	(6)
Aug.	84	EA	30-3	An important role for small computers. (Williams)	(4)
Oct.	84	PCG	82-87	Home micro supertest. Pt. 3 (Bollington)	(5)
Nov.	84	PCG	14-19	Home micro superest. Pt. 4 (Bollington)	(4)
Nov.	84	EA	78-80	VZ-200 as a WP (DSE E&F tape WP). (Williams)	(2)
Dec.	84	CHC	28-31	Review of video games consoles.	(4)
Mar.	85	EA	31-33	Back to the VZ-200. (Williams)	(1)
Jul.	85	ETI	102-6	Dick Smith's new VZ-300. (Rowe)	(5)
Aug.	85	EA	22-7	WP on the new VZ-300. (Williams)	(5)
Dec/Jan	86	PCG	11-15	How to buy a micro - VZ-300 compared.	(4)
Aug.	86	AHC	38-39	Computers for the Rest of Us. (Roberts)	(2)

Nov.	86	AHC	44	Letter. (Kennedy)	(-)
<u>GENERAL PROGRAMMING</u>					
Apr.	81	ETI	87-93	Extra 280 opcodes.	(4)
Jun.	81	ETI	97	280 uncovering. (Dennis)	(1)
Jul.	81	ETI	83	280 uncovering. (Garland)	(-)
Feb.	82	YC	64-66	Understanding Assembler (Bell)	(3)
Mar.	82	YC	74-77	"	(4)
Apr.	82	YC	61-63	"	(3)
May	82	YC	60-62	"	(3)
Jun.	82	YC	99-101	"	(3)
Jul.	82	YC	1-74	"	(3)
Sep.	82	YC	57-59	"	(3)
Nov.	82	YC	45-46	"	(2)
Dec.	82	YC	93-97	"	(4)
Jan/Feb	83	YC	52-55	"	(4)
Mar.	83	YC	61-62	"	(2)
Aug.	83	YC	62-68	"	(6)
Oct.	83	YC	87-89	"	(2)
Nov.	83	YC	102-104	"	(3)
Feb.	84	YC	93-94	"	(2)
Apr.	84	YC	123-126	"	(2)
Jan.	83	PE	3/1-3/5	PE Micro-file #3 - 280. (Coles)	(5)
Mar.	84	APC	73-85	Teach yourself assembler Pt. 1 (Overaa)	(6)
Apr.	84	APC	57-64	(8080, 280, 6502)	(5)
May	84	APC	89-98	Pt. 3 (Overaa)	(5)
Jun.	84	APC	53-60	Pt. 4 (Overaa)	(5)
Jul.	84	APC	61-64	Pt. 5 (Overaa)	(3)
Aug.	84	APC	110-116	Pt. 6 (Overaa)	(5)
Sep.	84	APC	145-151	Pt. 7 (Overaa)	(4)
Jan.	85	APC	122-124	Sort at input. (Ithell)	(1)
Feb.	85	APC	103-109	The basic art - algorithms, structures. (Liardet)	(4)
Mar.	85	APC	98-109	Pick a number - arithmetic. (Liardet)	(5)
Apr.	85	APC	79-87	It takes all sorts - sorting. (Liardet)	(5)
Oct.	85	APC	82	The Art of Programming - Progress. (Hjalton)	(-)
Jun.	85	APC	170-171	Comment on binary search. (Lamich)	(1)
Jun.	85	APC	171-173	Comment on distribution sort. (Riordon)	(1)
Oct.	85	YC	107-8	Sorting out the sorts. (Jankowski)	(1)
AEM		Australian Electronics Monthly		ETI Electronics Today	
AHC		Australian Home Computers		International	
APC		Australian Personal Computer		M80 Micro-80	
APH		Australian Photography			
ARA		Amateur Radio			
ARA		Amateur Radio Action			
BB		Bits and Bytes (NZ)			
BI		Break In (NZ)			
BYC		Bumper Book of Programs by YC		MC Micro Choice (UK)	
CC		Creative Computing (US)		PCG Personal Computer Games	
CFG		Computer Fun and Games		PCN Personal Computer News (UK)	
CI		Computer Input (NZ)		PE Practical Electronics (UK)	
CLC		Classroom Computing		SYN Sync (US)	
CT		Computing Today (UK)		WM Which Micro (UK)	
CHC		Choice		YC Your Computer	
EA		Electronics Australia		YCU Your Computer (UK)	

The numbers in brackets are the number of sheets in each article. A dash (-) indicates that the article is on the same sheet as the item above.

If Users wish to obtain copies of the articles referred to in this bibliography, they may -

- contact [] for copies ..or..
- buy back copies of the magazine from the distributor ..or..
- borrow from your local library.

I can supply copies FOR YOUR OWN USE ONLY at 20c. per sheet. Kindly add postage to your request as follows:

No. of Sheets	Old.	Interstate (Surface)
1 - 3	\$0.36	\$0.36
4 - 18	\$0.50	\$0.55
19 - 45	\$0.65	\$0.75
46 - 90	\$0.90	\$1.00
> 90	\$1.45	\$1.90
	expensive!	

FURTHER LITERATURE RELATING TO THE VZ200/300 COMPUTER

As [] extension to my list of magazine articles, I have produced the following list of books (I have copies of all of the publications). The books relate to the VZ computer specifically, Microsoft BASIC Level II or the Z-80 microprocessors, [] used in the VZ200/300. Additionally, I hold a lot of additional technical information, ROM listings, Users Group newsletters, software etc.

TECHNICAL BULLETINS FOR VZ COMPUTERS

- # 88 Printing out System-80 screen graphics. (2)
- # 91 Programming the VZ-200 computer's joysticks. (3)
- # 92 Finding where variables are stored by the VZ-200's BASIC. (3)
- # 93 Problems with the X-7208 printer/plotter and Microsoft BASIC. (1)
- # 94 Using the X-3245 TP-40 printer/plotter with the VZ-200 & System-80. (1)
- # 98 Printing lower case and control characters on the VZ200/300. (1)
- #111 VZ-300 Mailing List tape to disk file conversions. (1)
- #114 Obtaining colour on the VZ300. (1)
- #116 Fixing the printer bug in the VZ Editor-Assembler. (1)

BOOKS ON VZ COMPUTERS

- Henson, T.L., 1983 "Introduction to Computing". DSE, 114 p. (60)
- Hartnell, T., 1983 "Getting Started". DSE, 121 p. (68)
- Predebon, N., 1983 "Further Programming". DSE, 135 p. (74)
- Hartnell, T., 1983 "The Giant Book of Games". DSE, 179 p. (94)
- Pringle, G., 1983 "First Book of Programs". DSE, 58 p. (60)

* * POKING EXTENDED BASIC * *

COMMANDS.

BY Gordon Browell.

If you have not obtained or do not wish to use either of the special EXTENDED BASIC units, ie TUG or TU10, then these methods can be used. One of them ~~was~~ used in Bioplot sent in by Mr Davis of Mildura which was printed in #13 of LE'VZ. The command used was <ON GOTO>.
(J.D.)

*** IN BRIEF. ***

TELECOM is no longer selling its Computerphone because projected sales figures were never reached.

Sophisticated software will help eighteen Australians participate in one Australian Bicentennial project. Tim McCartney-Snape, Jon Chester and several Army climbers will tackle Mount Everest.

The Grand Prix Office for the Adelaide leg of the big car race in November will use an accommodation system running on a Hewlett-Packard 3000.

Australian "hackers" succeeded in penetrating top secret European computer systems, as well as Nasa, Prime, and General Motors systems.

* WORD PUZZLE ANSWERS. *

SC.MAGAZINEFBBCQ
KO.NOBBIR.OIEOU
IMONITORDOCRJRI
IPEXPOBETEUOBRC
NI...ABBNTUPIEK
GL..SUATARA.TSW
.E.IGLELNS...PR
.RCGLNCAC...OI
..E.INLA...NT
.R.AE.L...DE
..LM...E
..O...N
.N...C

Suppose you wanted to ~~use~~ MEM. This is the command for returning the amount of unused memory. Following are three methods of putting the TOKEN for MEM into a program. As MEM must be preceded by the command PRINT the address for PRINT must be 31469, therefore MEM must be POKED into 31470. To do this we reserve that address by typing in a DUMMY CHARACTER before making the POKE. The DUMMY CHARACTER used here is the HASH sign, #.

FIRST LINE METHOD

```
10 PRINT# (RETURN)
POKE31470,200 (RETURN)
```

When LISTed line 10 appears as...10 PRINT
The command is invisible but the token for MEM is in place and when RUN will give the unused memory space.

GOSUB METHOD

MEM in the first line may be inconvenient. This method lets you use MEM anywhere in your program. The line to receive the token must be entered first, as...

```
20 PRINT# (RETURN)
POKE31470,200 (RETURN)
```

Now enter...

```
10 GOTO100 (RETURN)
30 RETURN (RETURN)
```

Line 100 now becomes the true beginning of the program and GOSUB20 can be used anywhere, whenever MEM is required.

PEEK ADDRESS METHOD

To put MEM anywhere in a program requires the determining of the EXACT address. While a program is being entered, at the spot where MEM is required, enter the dummy character #.

The program should be correct up to this point. Let's assume the last line of the incomplete program is...
130 CLS:PRINT"MEMOR":#

Now enter directly the following...

```
PRINTPEEK(30969)+256*PEEK(30970)-40
```

The number returned is the address of #.

POKE this number with 200 (for MEM). If the number is greater than 32767 subtract 65536. You can now continue entering your program from the NEXT line number. Care must be taken not to overwrite the invisible MEM.

VeeZed INVISIBLE COMMANDS

RANDOM	10 #	POKE31469,134
Reseeds RND(n) to give a different series of RANDOM numbers.		
DEFINT	10 A,B	POKE31469,153
Defined all variables beginning with A and B as INTEGERS.		
DEFSNG	10 C,D	POKE31469,154
Defines all variables beginning with C and D as SINGLE PRECISION (6/7 floating point).		
DEFDBL	10 E,F	POKE31469,155
Defines all variables beginning with E and F as DOUBLE PRECISION (16/17 floating point)		
ONAGOTO100,200,300		POKE31469,161
10 #AGOTO100,200,300		
ONAGOSUB100,200,300		POKE31469,161
10 #AGOSUB100,200,300		
ONERROR60T01000	ON = POKE31469,161	
10 #60T01000	ERROR = POKE31470,158	
ONERROR60SUB1000	ON = POKE31469,161	
10 #60SUB1000	ERROR = POKE31470,158	
RESUME	10 #	POKE31469,159
After ERROR return to error point.		
10 #100	POKE31469,159	
After ERROR 60T0100.		
10 #100NEXT	POKE31469,159	
After ERROR return to line AFTER error point.		
AUTO	10 #	POKE31469,183
Automatically prints line numbers beginning at 10 incrementing by 10s.		
10 #100,10	POKE31469,183	
Automatically prints line numbers beginning at 100 incrementing by 10s.		
NOTE: If AUTO is halted by BREAK, POKE30945,175 to restart AUTO from where it was halted.		
VARPTR	10 # (X)	POKE31469,192
Used to locate Memory Address of a variable.		
STRING*	10 PRINT#(12,45)	POKE31470,196
Will PRINT 12 Asterisks (ASCII 45). Maximum length of string is 256 characters.		
MEM	10 PRINT#	POKE31470,200
Returns the amount of unused memory.		
FRE	10 PRINT#(A)	POKE31470,218
Returns the number of unused BYTES.		
10 PRINT#(A6)	POKE31470,218	
Returnd the number of unused BYTES in the reserved String spaces.		
CINT	10 #Z	POKE31469,239
Removes all digits after the decimal point.		
CSNG	10 #Z	POKE31469,240
Converts numeric variable from DOUBLE to SINGLE PRECISION.		
CDBL	10 #Z	POKE31469,241
Converts numeric variable from SINGLE to DOUBLE PRECISION.		
FIX	10 A=#(n)	POKE31470,242
Removes all digits to the right of the decimal point. Does not round-off negative numbers.		
ERL	10 PRINT#	POKE31470,194
Returns the line number from which a program branched to ERROR routine.		
ERR	10 PRINT#	POKE31470,195
Returns value related to type of ERROR.		
POS	10 A=#(X)	POKE31471,220
Returns current CURSOR position. (X) is dummy argument.		

LE'VZ FORMATS.

To help me time-wise to make LE'VZ a better magazine, and yourself to get the most out of it, please read this page.

ALL PRICES are in Australian Dollars.

CURRENT ISSUE price is A\$2.00 which includes surface/air postage within Australia and Air Mail to New Zealand. If you require more than one copy at one time, extra money must be sent to cover postage.

LE'VZ IS (C) COPYRIGHT.

NEW MEMBERS must start by sending \$4.00 as I do not charge a yearly subscription. This makes it worth while entering your name, address and other data into our D'BASE. You then receive the current issue if it is in a certain time period between the main send LE'VZ runs. If that is close to the next issue, you will receive that and not the "old" current issue. New Members can send more than \$4.00, as long as it is in multiples of \$2.00.

Present OOPs have their \$ credit printed at the top of their name and address label if sent in the main run. If your credit is less than \$2.00., then a little reminder slip is included with the LE'VZ sent, stating that this is your last issue. Some folk have various money amounts left over from other software or hardware purchases put into their LE'VZ credit, and so odd \$ amounts do occur.

BACK ISSUES are from #8 to the current issue. The price is \$3.00 each. This includes surface/air postage within Australia and Air Mail to New Zealand. If you require more than two copies at one time, extra money must be sent to cover postage.

We usually have most Back Issues in stock. We send what we have and back order the others for you if required. If they are not sent within a couple of months, or with the next Current issue, please remind us.

GENERAL LIST refers to OOPs who want their name, address and data made available to other OOPs when asked for. You may like to contact OOPs in your state, or OOPs with VZ200s. Not all OOPs want their name and information made public, so if that applies to you, you must answer N (no). IF YOU DO NOT WANT YOUR INFO MADE PUBLIC, ANSWER N (no) ON THE DATA SHEET. IF YOU DO NOT ANSWER Y (yes) OR N (no) THEN YOU WILL AUTOMATICALLY BE PUT ON THE GENERAL LIST.

Remember, you may receive letters from OOPs months after you may have sold your VZ.

ANY COMMUNICATION to me that requires a written reply must be accompanied by a Self Addressed Stamped Envelope. Do not expect an immediate reply, as I may need to contact others to formulate an answer.

Always state your record number. That could be between A02 and A98, B01 and B98 or C01 and CXX. I have about 240 financial and unfinancial folk to keep track of. From LE'VZ #15, your record number and \$ credit are printed at the top of your name and address label.

DO NOT TELEPHONE ME ON SUNDAY!!!

CIRCUIT, ROM and PROGRAMME LISTING PRINTOUTS can be sent to you at 20C per A4 page plus postage. Do not ask for the complete VZ ROM listing as it is very long and is about 15MM in thickness.

LETTERS TO THE EDITOR are welcome either as general comments, complaints or asking for help. As with contributors, please ensure that your typewriter or printer prints clear and DARK. In the new 35 character normal size print, IE. 90MM line length, right justified or wragged. If you have to write by hand, use a RED pen and write in the format just mentioned.

ADVERTISING is a free service to OOPs who are financial, for personal use only. Please use the above 35 character format. About 100 words or less.

CONTRIBUTIONS are very welcome. Please write your letter on a separate piece of paper to your contribution, which allows separate filing of material. You can send in programme listings in M/L or BASIC. Hardware modification or equipment drawings. Hints and any useful information. As above, use the new 35 character format except if it is a large circuit, drawing or photo. If it is a full page contribution reduce by photo copying so that there is a 20MM margin all the way around.

In fact I would like to receive more hardware contributions. Also photos of your equipment would interest others. There is a little problem here though as different photo copiers reproduce certain colours differently. We can but try.

BASIC AND M/L PROGRAMME LISTINGS need special requirements. Programme listings in M/L or BASIC can be sent as printed in normal size print which I can reduce-copy to make the master. Please make sure the print is dark and clear. The better approach is to send the programme on disc or tape. This enables me to give it a short test and check that it does at least does RUN. I can then print it in reduced mode while <LISTING> it.

TAPE/DISC CONTRIBUTIONS are therefore the best to send in this regard. This applies to programme listings or text. In regards to text, please send on E&F Wordprocessor tape which I can convert to QUICKWRITE Wordprocessor files or QUICKWRITE files on disc. Send in a padded post bag, and we will return it to you as soon as possible. We will pay the return postage. In this way if it is a programme, it can be later issued as a PUBLIC DOMAIN programme. You must let me know if you will allow this to happen.

VPROGRAMMEZ-VHINTZ-VHARDWAREZ book. People have suggested that I print a second book. Please let me have permission in WRITING if you would like any of your contributions included in it.

Finally, I do not promise to print any or all contributions, this is at my discretion.

INFORMATION CONTACTS

Here are some other folk who you can contact. Always include a SASE, if you require a written reply. If you don't live in the same country, send a couple of International Reply Coupons. These are available at Post Offices throughout the world. Please use good judgement if you telephone, perhaps not on Sundays. Check with the person concerned.

Graphics, M/L, printer info, educational.

Mr.Larry Taylor, 4 Columbia Court, SPRINGWOOD. QLD. 4127. 'phone (07)208 1258.

M/L, hardware, BASIC programming and his special list of all types of info.

Mr.Bob Kitch, 7 Eurella St., KENMORE. QLD. 4069. 'phone (07)378 3745.

Software list.

Mr.Eddie Tomes, 3 Kilkenny St., CAPALABA. QLD. 4157. 'phone (07)390 2797.

Printer/Plotters.

Mr.Stan Noble, 307 Mt.Crosby Rd., CHUWAR. QLD. 'phone (07)395 5140.

Communications, Modems, RTTY.

Mr.Irving Spackman, 78 Waima Crescent, TITIRANGI. AUCKLAND. New Zealand.

RTTY Units.

Mr.Col Paton. VK4BCP. 225 Pallas St., MARYBOROUGH. QLD. 4650 'phone (075)221 090.

Chip 8 programming.

Mr.Jeremy Lee, c/o P.O. Box 221, ASHGROVE. QLD. 4060 'phone (07)379 7988.

And also that every man should eat and drink, and enjoy the good of all his labour, it is the gift of GOD.



* SOFTWARE FOR SALE FROM VSOFTWAREZ *

39 Agnes St., TOOWONG. QLD. 4066. AUSTRALIA. (07) 371 3707.

NOVEMBER, 1987.

All prices are correct at time of printing, but may change without notice.
All articles available while stocks last. All prices in A\$.
All tape software includes postage up to four tapes.
When ordering software, always state := which computer VZ200 or VZ300, if you have an expansion RAM unit, and if you have a disc drive system connected or denote as below.

VZ1 = unexpanded VZ200. VZ2 = unexpanded VZ300.
VZ3 = expanded VZ200. VZ4 = expanded VZ300.

IE. TB15 = Tape only unit of B15. DB5 = Disc only unit of B5.
T/DE4 = Tape or Disc unit available of E4. TU4 = unit only available on Tape of U4. DU22 = unit only available on Disc of U22.
The price stated is for a Tape unit. If a Disc unit is required, add \$5.00. to the Tape price. The price of a Disc unit is as stated.

We accept BANKCARD and VISACARD, as well as bank, building society, credit union, private cheques, or Aust Post money orders.
Make cheques payable to J.D'ALTON or VSOFTWAREZ.

* * * NEW SOFTWARE * * *

DU56. DISKOPS4. \$10.00. VZ3-VZ4.

This is actually called DISKOPS4 + 2. It supercedes DU47 DISKOPS2 AND DU47A DISKOPS2 which are now Public Domain at the same price of \$10.00.

There are three separate utilities on the disc, and are for use with the DSE. Editor Assembler unit. There are eleven additional commands. Instructions are included. DISKOPS4 + 2 patches in permanently with ED/ASS. It then allows Loading, SAVEing of source code and BSAVEing object code to/from disc. BSAVEing is the same as TD: for tape.

It also includes the normal disc BASIC commands. If a disc error occurs, then DISKOPS4 + 2 BASIC is entered. ASS is to enable the return to the ED/ASS. BASIC does the reverse.

Users of DISKOPS1 and 2 are also catered for.

DB57 QUICKWRITE V4 \$40.00. VZ3-VZ4.

This new version DOES NOT replace QUICKWRITE V3. The main difference being that V4 allows the user to imbed special character codes ANYWHERE in the text. This includes a single word or even part of a word, anywhere in a line of text. If you refer to LE'VZ #17 on page 14, I printed a short article about how to use the printer control codes for QW V3. The last one directs the printer to print in three styles, using thirteen codes. With QW V4 these are designed by the user and are represented by A SINGLE CODE CHARACTER and saved onto disc. A whole set of fonts can be built up by the user. I have been testing it for some months now and you should have seen some results in LE'VZ #17.

QW V4 will also recognise the QW V3 square bracketed control codes. Printing a section of the text is also allowable, even one word.

KILL and RETRIEVE are additional Disc commands. Better editing/viewing facilities. Scrolling forward, backward, to beginning and end of text is easy to achieve.

Purchasers of QW V3 can buy QW V4 at a discounted price of AUD\$20.00. An instruction booklet is of course included.

QUICKWRITE IS ONLY OBTAINABLE FROM US.

If anyone requires a short description of any of our software, please refer to previous LE'VZs as all software is initially given a brief description as NEW SOFTWARE. The alternative is to send for our catalogue, **VLISTZ**. Make sure you send a S.A.S.Envelope, 230MM x 100MM.

I would like to mention that a BASIC COMPILER and some other very interesting software is available by sending a S.A.S.E. to:-

Mr.Gavin Williamson, 20A Brunner Rd., BROADMEADOW. NSW. 2292
'Phone (069) 621 678.

--- HELP - HELP - HELP ---

Help. Mr Leslie Milburn would like someone who can assist in or write a PASCAL or C compiler.
Mr Leslie Milburn, 11 Swordfish Ave, RABY. NSW. 2566.
Phone (02)603 5981.

+ EXISTING SOFTWARE. +

D/TU2	EDITOR/ASSEMBLER	\$ 20.00.	VZ3-VZ4.
D/TB1	CASH BOOK LEDGER	\$ 20.00.	VZ3-VZ4.
TU4	COLOUR GRAPHICS	\$ 10.00.	VZ3-VZ4.
D/TE1	KEYBOARD	\$ 8.00.	VZ1-VZ4.
D/TE2	WORDMATCHING	Deleted.	
D/TE3	MEATPIES	\$ 10.00.	VZ3-VZ4.
D/TU3	UTILITIES	\$ 15.00.	VZ2-VZ4.
TU5	WEAVING DRAFTS	\$ 10.00.	VZ1-VZ4.
D/TE4	MATHS COUNTDOWN	\$ 10.00.	VZ3-VZ4.
D/TE5	COORDINATES	\$ 10.00.	VZ2-VZ4.
D/TE6	TOWER OF HANOI	\$ 8.00.	VZ1-VZ4.
D/TE7	MICROSCOPE	\$ 8.00.	VZ3-VZ4.
D/TE8	BLOCK PUZZLER	\$ 10.00.	VZ1-VZ4.
TE20	PLUS and MINUS	\$ 10.00.	VZ1-VZ4.
TE24	MATHS	\$ 15.00.	VZ3-VZ4.
TE25	QUEENSLAND	\$ 10.00.	VZ1-VZ4.
TE27	EUROPEAN CAPITALS	\$ 10.00.	VZ1-VZ4.
TE30	CAMPING	\$ 10.00.	VZ1-VZ4.
D/TG2	MANSION and NOVA	Deleted.	
D/TG3	VZ MONOPOLY.	Deleted.	
TU12	SEARCHTAPE	Deleted.	
D/TG13	SCOTLAND YARD	\$ 12.50.	VZ3-VZ4.
DB4	LE'VZ D'BASE	\$ 98.00.	VZ3-VZ4.
TB15	DATABASE-VZ	\$ 25.00.	VZ3-VZ4.
TG35	HAUNTED MANSION	\$ 12.50.	VZ3-VZ4.
TU6	VZ EXTENDED BASIC	\$ 20.00.	VZ1-VZ4.
TU7	PROTECT	Deleted.	
TU8	CMERGE/DELETE/REN	Deleted.	
TU9	MONITOR DEBUGGER	\$ 25.00.	VZ1-VZ4.
This new version finds VZ memory size itself.			
TU10	EXTENDED BASIC	\$ 12.50.	VZ3-VZ4.
TU11	ARRAY/RESTORE	\$ 14.95.	VZ3-VZ4.
You must have TU10 to use TU11.			
D/TU12	FILESEARCH	Deleted.	
DE1-B	EDUDISK	\$ 50.00.	VZ3-VZ4.
T/DE9	MEATPIES V2.	\$ 15.00.	VZ3-VZ4.
TU18	LOAD X80 FILES.	\$ 20.00.	VZ1-VZ4.
This new version finds VZ memory size itself.			
T/DG36	BLACKJACK.	\$ 20.00.	VZ3-VZ4.
T/DG37	POKER MACHINE.	\$ 20.00.	VZ3-VZ4.
T/DG38	WORDSQUARES.	\$ 10.00.	VZ2-VZ4.
T/DG39	COMPUTER MONOPOLY.	Deleted.	
T/DG40	TRIVIAL CULT.	\$ 15.00.	VZ2-VZ4.
T/DG41	SCOTLAND YARD 2.	\$ 15.00.	VZ3-VZ4.
DB5	LE'VZSTATEMENT.	\$185.00.	VZ4.
DB16	CHEQUE LEDGER D.	\$ 60.00.	VZ3-VZ4.
D/TU19	COPY/PROTECT.	\$ 30.00.	VZ1-VZ4.
DU20	DISC GUARD.	\$ 60.00.	VZ1-VZ4.
T/DU21	VZ-EPSON PRINT/P.	Deleted.	
DU22	DISK COPY.	\$ 10.00.	VZ1-VZ4.
D/TU48	FILESEARCH.		
D/TG51	BLOCK 1.	\$ 15.00.	VZ2-VZ4.
DPD1	PUBLIC DOMAIN.	\$ 10.00.	VZ1-VZ4.
DPD2	PUBLIC DOMAIN.	\$ 10.00.	VZ1-VZ4.

* * * NEW SOFTWARE * *

D/TG44	MONOPOLY.	\$ 17.00.	VZ3-VZ4.
D/TG45	MONOPOLY.	\$ 19.50.	VZ4.
D/TG50	ESCAPE RIVER.	\$ 15.00.	VZ3-VZ4.
D/B46	QUICKWRITE.	\$ 40.00.	VZ3-VZ4.
DU47	DISKOPS1.	\$ 10.00.	VZ3.
DU47A	DISKOPS2.	\$ 10.00.	VZ4.
D/TG42	AIRTRAFFIC CONTROLLER.	\$20.00.	VZ3-VZ4.
D/TG43	LEARJET.	\$ 20.00.	VZ3-VZ4.
T/DU49	VZ-EPSON PRINT/PATCH.	\$ 15.00.	VZ1-VZ4.
D/TG54	GOLF.	\$ 15.00.	VZ3-VZ4.
DU1	CONVERT2.	\$ nil	VZ3-VZ4.
See DB46 QUICKWRITE.			
D/TG53	GALACTIC EMPIRES.	\$ 15.00	VZ3-VZ4.
D/TE10	SNERTLE.	\$ 10.00.	VZ2-VZ4.
D/TG51	BLOCK 1.	\$ 15.00.	VZ2-VZ4.
D/TG52	SOLO BATTLESHIPS.	\$ 15.00.	VZ2-VZ4.
D/U56	DISKOPS4 +2.	\$ 10.00.	VZ3-VZ4.
DB57	QUICKWRITE V4.	\$ 40.00.	VZ3-VZ4.

BRISBANE VZ USERS WORKSHOP.

WORKSHOP HELD ON THE 1-8-87.

We were pleased to welcome 3 new faces to our workshop which brought our attendance to 10.

Jeremy Lee, who is one of our regular members, demonstrated his program called "ANIMATION". He wrote this program specifically to enter a competition being held by Griffith University for their open day. The program illustrates some of the computer systems commonly in use today. I have since learnt that Jeremys' program took out the \$150 first prize in this competition, congratulations Jeremy. Anyone wishing more information on Jeremys' program can contact him through our Co-ordinator Bob Jones, 63 Tingalpa St., Wynnum West, QLD, 4178. Phone (07) 396 0376, or c/o P.O. Box 221, ASHGROVE, QLD, 4060, PHONE (07) 379 7988.

Mr. & Mrs. Shannon, who were attending for the first time, presented the workshop with an interesting problem, they had been using their VZ to store the titles of their C.D. (Compact Disc) collection, however the small program that they were using was not able to "alphabetise" their list, so Larry Taylor set to work on the Dick Smith "DATA BASE" with his "DISK DOCTOR" and after a short time, he was then able to list the program and modify it to the point where it would accept the C.D. data. Larry has since done further modifications to this program which speed it up considerably.

WORKSHOP HELD ON THE 5-9-87.

Our attendance was again 10 and we were all pleased to hear from Bob Jones that he has negotiated a 50% reduction in the fees for the class room that we use for the workshop, a welcome exception to modern trends.

Thanks also to John Benfer for arranging with SPENCERS OFFICE AUTOMATION for a substantial discount on several Brother M1109 dot matrix printers, \$410 each plus \$35 for pin feed.

We were very fortunate to welcome Mr. Irving Spackman to our September workshop, Irving is a lecturer at the Auckland Teachers College and also an amateur radio operator, so we were delighted when he accepted our invitation to address the meeting.

Irving first used the VZ in connection with his radio interests and now also uses it for satellite tracking, he also remarked that the VZ outperformed a few well known computers in this field. Many thanks Irving for an extremely interesting address.

WORKSHOP HELD ON THE 3-10-87.

With an attendance of 9 we started our meeting with John D'Alton outlining plans for a "MINI VZ EXPO" in December. John is hoping to hold the EXPO at CAPALABA STATE HIGH SCHOOL in conjunction with the "BVZUW" monthly meeting.

Bob Jones made the suggestion that a "BVZUW MEMBER PROFILE" be included in our monthly report, so hopefully this should commence with our next report. Bob also proposed that we start a software library so that members can become familiar with the many pieces of software that are now available for the VZ. It will also help members to choose the best software for their needs before making a purchase. Many thanks to Larry Taylor for endorsing this proposal by making his software available to the workshop.

Recently, while on a trip to Coffs Harbour, Eddie Tomes paid a visit to their local electronics store, (Coffs Harbour Electronics). They are not a Dick Smith store, however they do sell the VZ 300. Apparently each unit they sell has to be slightly modified to cope with local power supply fluctuations.

Demonstrations were the order of the day for the rest of the meeting, I gave a small demonstration of the Hunter Valley VZ User Groups' E & F word processor patch, this excellent piece of software, converts the tape version of the E & F word processor to full disk control, (currently selling for only \$10. from H.V. VZ U.G.). Next Larry demonstrated the Laserlink D.O.S. V 2.0 EPROM that he had just installed in his disk controller. This eprom gives an extra 11. D.O.S. commands as well as decreasing loading time by approximately 25%, (\$35. from LASERLINK). Larry then demonstrated his A.E.M. 4505 VOICE SYNTHESIZER. John D'Alton gave a further demonstration of QUICKWRITE WORDPROCESSOR V.3 so that we contributors to LE'VZ can use it efficiently. John donated this W.P. to the BVZUW some time ago and is for general use by members.

So as you can see we had a very interesting and informative afternoon. Thats all for now.

JOHN WILKINS.

P.S. Along with other famous faces the VZ now makes regular appearances on "A COUNTRY PRACTICE". Spotted by a keen eyed Eddie Tomes.

VZ OOPS IN NEW ZEALAND ON GENERAL LIST.

This is a list of New Zealand OOPs who are on the General List. You can contact these if you wish but always enclose a Self Addressed Stamped Envelope in your letter if you require a written reply. If you telephone, please do so at a reasonable hour and perhaps not on Sunday.

Mr John Ramsden. 9 Cowley Drive, HAMILTON.

No 'phone #.

Mr T.J.MC.Leod, 132 George St., INVERCARGILL.

No 'phone #.

Mr Vinod-Patel, P.O. Box 793, MATMATA.

No 'phone #.

Mr Peter Hill, P.O. Box 1972, CPD. AUCKLAND.

No 'phone #.

Mr John Mason, 59 Lancaster Rd., BIRKDALE.

'phone 437 318.

Mr Irving Spackman, 78 Haina Crescent, TITIRANGI. AUCKLAND.

No 'phone #.

**** DATA SHEET ****

I request a OOPs (Oners-Operators-F ogrammers) to complete, cut out and send back to me. As mentioned elsewhere in this LE'VZ, this is useful for OOPs who may like to contact other OOPs who live in their vicinity, etc. Answer N (No) if you do not wish your name put on this General List. If the answer is Y (Yes) or not answered at all, you will be put on the General List.

Date19..... Code # if known This LE'VZ number 18.
Surname..... Mr, Mrs, Miss and Christian name.....
Address..... Post Code
Telephone number. STD ()..... Onto General List Yes/No.....
Computer. VZ200 and/or VZ300.....Any other computer.....
Printer and/or plotter.....Disc system Yes/No.....
RAM Expansion.....K. Tape recorder. VZ DTR or other.....
RS232 terminal..... Yes/No.....Modem Yes/No..... Brand.....
Interest. Business, games, M/L, BASIC, hardware, etc.....
.....

HARDWARE AND FIRMWARE FOR SALE.

VSOFTWAREZ, 39 Agnes St., TOOWONG. QLD. 4066.
AUSTALIA. Phone (07) 371 3707.

Unlike our software prices, these do NOT include postage. Always include extra money with your order and we will send any surplus back in the parcel or put it towards any credit you may wish, such as to LE'VZ, if you are an OOP. If you wish to receive LE'VZ, read page 11.

Prices are in Australian dollars (AUD) as at the 1st. of November 1987. Items available while stocks last. There is NO WARRANTY on used items, but all are tested OK.

NATIONAL tape recorder used \$ 20.00.

16K RAM Pack used \$ 45.00.
VZ200 rubber membrane keys new \$ 18.00 each.
GP100 Printer. Good condition. used \$160.00 each.
C10 blank tapes new \$ 6.50 for five.
C20 blank tapes new \$ 7.00 for five.
Floppy discs MASHUA DDSS new \$ 18.00 for ten,
bulk, so they are not in packs.

VZ 300 Disc Drive used \$250.00.
VZ Disc Drive power pack. used \$ 20.00.
VZ Disc Drive Controller used \$ 50.00.
16K RAM Pack with VZ200/VZ300 changeover switch used \$ 60.00.
Printer interface used \$ 25.00.

CITIZEN 120-D Printer new \$490.00 including sales tax.

We are now Agents to sell this printer. It is the best printer in its price range. As you can see elsewhere in this LE'VZ, I have printed just a few of its printer/font styles.

Its recommended price is \$586.00 s/tax included. There is a 12 month warranty, backed up by DATATRONICS who are in most capital cities in Australia, so if problems should occur, the unit need only be sent to the nearest centre. Cartage costs are of course extra, paid by the purchaser, so include about \$20.00. for this.

BOOKS.
VPROGRAMMEZ-VZ-VZ new \$ 18.50 each.
Surface postage in Australia and NZ is included.
This is my own special book for beginners and advanced VZers.
BASIC Easier and Faster TRS80 new \$ 10.00 each.
By Lewis Rosenfelder.

OTHER VZ USER GROUPS & CLUBS.**AUSTRALIA.**

AD LIB Vee Zed MICRO.

Mr. Gordon Browell, 13 Brooks St., BIGGENDEN. QLD. 4621.

VZ USER.

Mr. Mark Harwood, P.O. Box 154, DURAL. NSW. 2158.

VZ DOWN UNDER.

Mr. George Seegie, 5 Cameron Court, WANTIRNA. VIC. 3152.

HUNTER VALLEY VZ USERS GROUP.

C/O P.O. Box 161, Jesmond. JESMOND. NSW. 2299.

MAVZ ENTHUSIASTS GROUP.

Mr. Graeme Bywater, P.O. Box 388, MORLEY. WA. 6062.

NEW ZEALAND.

CHRISTCHURCH VZ USERS GROUP.

Mr. Daniel Ayers, 188 Langdons Rd., CHRISTCHURCH. NZ.

VZ LINK.

Mr. Peter Hill, P.O. Box 1972 C.P.O. AUCKLAND. NZ.

COMPLETE VZ SYSTEM FOR SALE.

Mr. and Mrs B.S. Colbert need to sell their entire set-up as they have changed to a Commodore C64 because their friends all have C64'S. I wish them cheerio and thank them for their being OOPs for the last year or so.

The system is:-

VZ300, 16K RAM Pack, Disc Drive System, Joysticks, DSE. Data Recorder, Printer Interface and lots of software.
\$400.00 the lot. They would prefer not to break up the system to sell, but as one lot.

Their address is:-

P.O. Box 299, STAWELL. VIC. 3380.. PHONE (053) 582 833.

